WHAT IS CLAIMED IS:

1. A tool for impact insertion of a wire into a terminal, wherein the tool comprises:

a) a gun-shaped housing with a front and a rear and a handle with a trigger mechanism,

b) electric motor drive means within the housing and having a shaft and and with the drive means operatively connected to the trigger mechanism and including a gear-down mechanism having an output for reducing the motor shaft speed while increasing its torque,

c) a power compression spring having a rest position and a compressed position,

d) first means at the front of the housing for supporting a blade for inserting a wire into the terminal when impacted,

e) means coupled between the power compression spring and the first means in response to multiple revolutions of the motor shaft for compressing the spring from its rest position into its compressed position and operative to suddenly release the compressed spring to impact the first means and in turn the blade.

2. A tool as claimed in claim 1, further comprising a battery mounted in the housing and electrically connected to drive the motor.

3. A tool as claimed in claim 1, wherein the means for compressing the spring comprises a driven cam rotatable with the gear-down mechanism and a follower cam connected to the compression spring.

4. A tool as claimed in claim 3, wherein the means for compressing the spring comprises cylindrical cams with complementary cam surfaces and sharp cam lobes configured so as to cause the cam length to increase when rotated until the cam lobe is encountered.

5. A tool as claimed in claim 1, further comprising second means at the front of the gun for adjusting the power spring pressure when reaching the compressed position.

6. A tool for impact insertion of a wire into a terminal, wherein the tool comprises:

a) a gun-shaped housing with a front and a rear and a handle with a trigger mechanism,

b) electric motor drive means within the housing and having a shaft and and with the drive means operatively connected to the trigger mechanism and including a planetary gear-down mechanism having an output with reduced speed but with increased torque, said motor means and gear-down mechanism having a common axis,

c) a battery mounted in the housing and electrically connected to drive the motor,

d) an axially-arranged power compression spring having a rest position and a compressed position,

e) first means at the front of the housing for supporting a blade for inserting a wire into the terminal when impacted,

f) means coupled between the power compression spring and the first means in response to multiple revolutions of the motor shaft for axially compressing the spring into its compressed position and operative to suddenly release the compressed spring to impact the first means and in turn the blade,

g) said means for axially compressing the spring comprising a driven cam rotatable with the gear-down mechanism and a follower cam mounted for axial movement and connected to the compression spring, said cams being configured such that a predetermined rotation of the driven cam axially moves the follower cam so as to move the compression spring from its rest to its compressed position.

7. A tool as claimed in claim 6, wherein the means for compressing the spring comprises cylindrical cams with complementary end cam surfaces and sharp cam lobes configured so as to cause the combined axial cam length to increase when the driven cam is rotated until the cam lobe is encountered whereupon their combined axial cam length abruptly reduces.

8. A tool as claimed in claim 7, wherein the complementary end cam surfaces have a helical shape.

9. A tool as claimed in claim 7, wherein the output of the planetary gear mechanism comprises a hollow cylinder, the compression spring and follower cam are mounted adjacent one another within the hollow cylinder, the driven cam is mounted adjacent the driven cam within the hollow cylinder and connected to for rotation with the hollow cylinder.

10. A tool as claimed in claim 9, wherein the follower cam has an axially-extending shaft extending toward the driven cam and on which the driven cam is slidingly mounted, means for fixing the shaft and the follower cam in non-rotating but sliding relationship to the housing, the shaft acting as a hammer and having an end adjacent the first means, whereupon when the released spring drives the follower cam axially forward, the shaft end impacts the first means to

create the impact force on the blade.

11. A tool as claimed in claim 6, further comprising second means for adjusting the impact force, said second means for adjusting the impact force comprising third means for axially adjusting the length of the compressed spring while in its released position.

12. A tool as claimed in claim 11, wherein the third means for axially adjusting the length of the compressed spring comprises a bushing connected to the spring and a rotatable collet mounted at the front of the tool for axially moving the bushing.

13. A tool as claimed in claim 12, wherein the bushing is connected to the driven cam for pushing the latter and the adjacent follower cam toward the spring to pre-compress it to increase the impact force.

14. A tool as claimed in claim 6, further comprising fourth means mounted at the tool front for adjusting the circumferential orientation of the blade.

15. A tool as claimed in claim 6, further comprising fifth means for controllably stopping the motor at a desired circumferential orientation of the blade.

16. A tool as claimed in claim 15, wherein the fifth means for controllably stopping the motor comprises opto-electronic means coupled to sense a predetermined amount of rotation of the gear mechanism and circuit means for dynamically braking the motor in response to a signal from the opto-electronic means.

17. A tool as claimed in claim 6, wherein the cams are configured to rotate one revolution to move the spring from its rest position to its compressed position and then to release it to restore its rest position.